

**AMENDMENTS TO THE CLAIMS**

1-11. (Canceled)

12. (Currently Amended) A method of identifying an agent effective in preventing and/or treating a proliferative disease causing sclerosis, comprising

contacting a test agent with a biological sample;

determining the level of expression of at least one substance selected from the group consisting of ~~STAT3, phosphorylated STAT3~~, Smad1 and phosphorylated Smad1 in the biological sample in comparison to the level of expression of the substance in a control sample;

wherein a decrease in expression of ~~STAT3, phosphorylated STAT3~~, Smad1 or phosphorylated Smad1 in comparison to the expression level of the substance in the control sample indicates the agent is effective in the prevention and/or treatment of proliferative diseases causing sclerosis.

13. (Currently Amended) A method of identifying an agent effective in inhibiting the increase of extracellular matrix, comprising

contacting a test agent with a biological sample;

determining the level of expression of at least one substance selected from the group consisting of ~~STAT3, phosphorylated STAT3~~, Smad1 and phosphorylated Smad1 in the biological sample in comparison to the level of expression of the substance in a control sample;

wherein a decrease in expression of ~~STAT3, phosphorylated STAT3~~, Smad1 or phosphorylated Smad1 in comparison to the expression level of the substance in the control sample indicates the agent is effective in inhibiting the increase of extracellular matrix.

14. (Currently Amended) A method of identifying substances effective in inhibiting the expression of  $\alpha 1$  type IV collagen, comprising

contacting a test agent with a biological sample;

determining the level of expression of at least one substance selected from the group consisting of ~~STAT3, phosphorylated STAT3~~, Smad1 and phosphorylated Smad1 in the biological sample in comparison to the level of expression of the substance in a control sample,

wherein a decrease in expression of ~~STAT3, phosphorylated STAT3~~, Smad1 or phosphorylated Smad1 in comparison to the expression level of the substance in the control sample indicates the agent is effective in inhibiting the expression of  $\alpha 1$  type IV collagen.

15-24. (Canceled)

25. (Previously Presented) The method of any one of claims 12, 13, or 14, wherein the biological sample is selected from the group consisting of renal tissue sections, blood, sera and urine.

26. (Previously Presented) The method of any one of claims 12, 13, or 14, wherein the biological sample is selected from mesangial cells.

27. (Previously Presented) The method of any one of claims 12, 13, or 14, wherein the level of expression is measured at the nucleic acid level or the protein level.

28. (Previously Presented) The method of claim 12, wherein the proliferative disease causing sclerosis is a renal disease which damages glomeruli.

29. (Previously Presented) The method of claim 12, wherein the proliferative disease causing sclerosis is selected from the group consisting of diabetic nephropathy, chronic glomerulonephritis, membranous proliferative glomerulonephritis, focal glomerulosclerosis, light chain disease, cryoglobulinemic nephritis, HIV-associated nephritis, purpuric nephritis, hepatic fibrosis, and arteriosclerosis.

30. (Currently Amended) ~~The method of any one of claims 12, 13, or 14,~~ A method of identifying an agent effective in preventing and/or treating a proliferative disease causing sclerosis, or effective in inhibiting the increase of extracellular matrix, or effective in inhibiting the expression of  $\alpha 1$  type IV collagen comprising

contacting a test agent with a biological sample;

determining the level of expression of at least one substance selected from the group consisting of STAT3, phosphorylated STAT3, Smad1 and phosphorylated Smad1 in the biological sample in comparison to the level of expression of the substance in a control sample,

wherein a decrease in expression of STAT3, phosphorylated STAT3, Smad1 or phosphorylated Smad1 in comparison to the expression level of the substance in the control sample indicates the agent is effective in the prevention and/or treatment of proliferative diseases causing sclerosis, or effective in inhibiting the increase of extracellular matrix or effective in inhibiting the expression of  $\alpha 1$  type IV collagen,

and wherein the level of expression of STAT3, phosphorylated STAT3, Smad1 or phosphorylated Smad1 at the nucleic acid level is measured using primer pairs selected from SEQ ID NOS[.]: 21 and 22, or SEQ ID NOS[.]: 5 and 6.

31. (Currently Amended) The method of any one of claims 12, 13, or 14, wherein the level of expression of ~~phosphorylated~~ STAT3, Smad1 or phosphorylated Smad1 at the protein level is measured by Western Blotting, ELISA or immunohistochemical analysis.